

SKYLAB

MONTHLY REPORT #11

- A. TITLE: FEASIBILITY OF USING S-191 INFRARED SPECTRA FOR GEOLOGICAL STUDIES FROM SPACE.
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- E. PERIOD: June 1, 1974-June 30, 1974

REMOTE SENSING LABORATORY
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(E74-10656) FEASIBILITY OF USING S-191
INFRARED SPECTRA FOR GEOLOGICAL STUDIES
FROM SPACE Monthly Report, 1-30 Jun.
1974 (Stanford Univ.) 3 p HC \$4.00
CSCL 08G G3/13 00656
Unclass

N74-29688

F. OVERALL STATUS (Problem areas, significant progress)

1. Tabs for day 256, orbit 39, track 29 received.
2. Second generation of SL-3 S-191 tapes received.
3. Reading of SL-3 tapes commenced. Due to confusion regarding conversion of digital counts on tapes to radiances, only tables of digital voltages versus wavelength obtained.
4. Some plots of radiance versus wavelength (from Tabs) completed for analysis in terms of ground targets and of atmospheric effects.

G. DATA RECEIVED TO DATE

See next page.

H. RECOMMENDATIONS (Decisions/Actions required to ensure attainment of scientific objectives).

It is imperative that we receive the RB-57 aircraft IR Pallet tapes so that we can initiate our altitude-dependence studies. Without these detailed spectra it is not possible to refine the spacecraft spectra for rock lithologies, atmospheric attenuation, etc.,

I. EXPECTED ACCOMPLISHMENTS FOR NEXT PERIOD

Study of the spectra from the spacecraft and the aircraft with the aim of observing the effects of atmospheric attenuation as a function of altitude, and of correlating both spacecraft and aircraft spectra with geology of their respective targets.

J. SIGNIFICANT RESULTS

None as yet.

K. SUMMARY OF FUTURE EFFORT

Correlation studies of spectra from SL-3 for the Nevada targets with known geology of the sites.
Examination of atmospheric perturbation to the observation of spectra of ground targets from spacecraft.

L. TRAVEL SUMMARY AND PLANS

Houston meeting of Principal Investigators.

Field trip to Nevada for ground measurement of spectra.

G. DATA RECEIVED TO DATE

AIRCRAFT RB57

SKYLAB

	Films	Boresight Film	Data Logs	Data Tapes	16mm.C.R.T. Plots	I.R. R57 Data Images	S190A	S190B	S191 Data Tapes	S191 Boresight Film
SL2	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	R.	N.R.	7 track (1 set of 2)*	R.
SL3	R.	R.	N.R.	N.R.	N.R.	N.R.	R.	N.R.	7 track (3 sets of 2) 2nd Generation (2 sets of 2)	R.

*Received unordered test tape and data tape (S192) from SL2 which we would like to retain for 3 months.

R.=Received

N.R.=Not Received